#### CONNECTICUT SITING COUNCIL

PETITION OF GROTON UTILITIES FOR A DECLARATORY RULING THAT NO CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED IS REQUIRED FOR A PROPOSED MODIFICATION TO THE BUDDINGTON SUBSTATION

#### 1. Introduction

Groton Utilities is a municipal electric utility and a Department of the City of Groton, CT as well as a Member of the Connecticut Municipal Electric Energy Company.

Pursuant to Section 16-50g et seq. of the Connecticut General Statutes, the City of Groton, d/b/a Groton Utilities is hereby petitioning the Connecticut Siting Council (the "Council") for a Declaratory Ruling that a Certificate of Environmental Compatibility and Public Need (the "Certificate") is not required for a proposed modification of the Groton Utilities Buddington Substation (the "Substation") for the reason that the proposed modification would not have a substantial adverse environmental impact.

In support of its petition, Groton Utilities provides the following description of the proposed modifications.

## 2. Purpose of the Project

This modification is being proposed as part of a regionally based improvement plan to address electric reliability issues in Southeastern Connecticut, all of which have been incorporated into the Eastern Connecticut Reliability Needs Assessment, the Eastern Connecticut (ECT) 2029 Solutions Study – Final" conducted by ISO-NE in June 2020. These improvements have also been the subject of various Petitions filed with the Council, including Petition 1486 filed by Eversource Energy for modifications to the Gales Ferry Substation in the Town of Ledyard, CT and Petition 1436 filed by Groton Utilities. All of the needs identified in the study are deemed time sensitive due to the number of thermal and voltage violations identified.

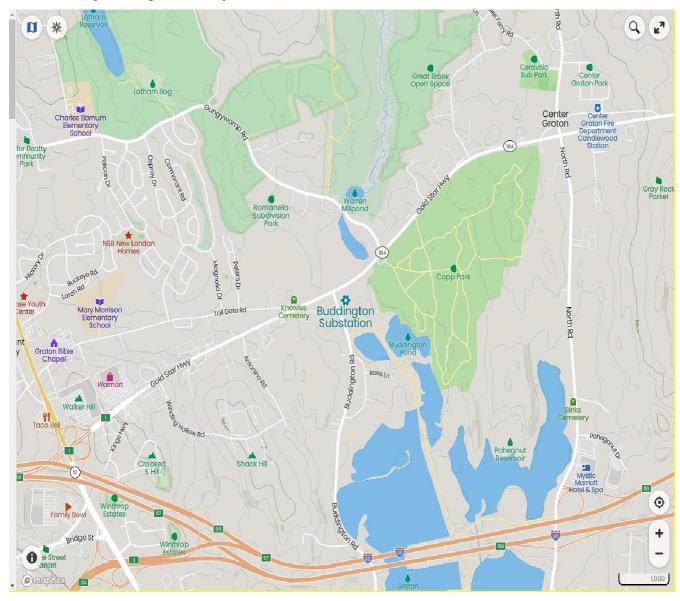
# 3. Proposed Modifications

The Substation modifications proposed by this Petition consists of the following:

- Rebuilding the existing 400 terminal
- Converting the terminal from 69-33 kV operation to 115-33 kV operation.
- Adding an additional 115-kV bus and one 115-kV circuit breaker with associated reconnection of the existing Buddington 1X transformer's high voltage taps from 67 kV to 110 kV
- Re-termination of the converted 400 Line (115-kV Line 1911) to the new 115-kV bus at Buddington

The Substation is located in Groton wholly within a commercial area with the only abutter being the City of Groton. The current Substation, built in 1950 and operating continuously since that time, is a 69kV & 115kV bulk substation with one (1) 69kV to 34.5kV and two (2) 115kV to 34.5kV three-phase autotransformers each being a 94 Megavolt Ampere (MVA) autotransformer, and six (6) 34.5kV distribution circuits.

The following is a map of the Project Area.



As a first step, there will be a demolition of the existing structure to accommodate space for the upgraded 400 terminal. The existing 400-line transformer will be relocated within the existing Substation perimeter onto a new concrete pad with containment. All new structures within the Substation will have new concrete foundations. All modifications being proposed in this Petition and construction will be performed inside the existing fence-line and within the existing footprint of the established Substation. The Substation perimeter and fence line is depicted in the highlighted area provided in Attachment A to this Petition.

The new structures inside the Substation will be the same height as the existing 1410- and 1280-line terminals. Attachment B depicts the proposed construction of the new Substation bay, which will replicate the existing structures within the Substations and illustrates that the height of the new structures will not deviate from the current line-terminals structures. Attachment C provides a description of the sequence of demolition that will occur.

There will also be a conversion of the 400-4 Line (Eversource/CTMEEC border to the Buddington 69-kV Substation) from 69 kV to 115-kV operation. The conductor of the line remains unchanged. The converted line will be renumbered to be the 1191-4 Line from Eversource/CTMEEC border to the Buddington 115-kV Substation located in Groton, CT.

Attachment D depicts the Substation plan on completion.

#### 4. Construction Methods

The Project would be constructed, operated and maintained in accordance with Groton Utilities' Best Management Practices Manual. Access to the Substation for construction-related vehicular traffic would occur via the existing Substation Buddington St. access road. The construction work will require the use of equipment such as excavators, dump trucks, bucket trucks, concrete trucks, and light duty trucks. It is expected that traffic from construction and related vehicles would be temporary and localized. It is not anticipated that improvements to the access road would be required. All of the equipment will be transported to the site on flatbed trucks and assembled on site. No staging area outside of the fence line will be required.

Normal work hours would be Monday through Saturday from 7:00 AM to 7:00 PM. Sunday work hours may be occasionally necessary due to delays caused by inclement weather and/or outage constraints. Multiple crews may work concurrently. Groton Utilities proposes construction to begin on approval of the proposed modifications by the Siting Council and completed by July 2023.

No additional clearing would be required to accommodate the modification to the Substation.

### 5. Grading, Installation of Foundations and Security

All grading that will occur will be within the existing fenced area. Existing security at the Substation consists of a six-foot chain link fence surrounding the perimeter of the substation. It

is not anticipated that new security will be installed at his time but upgraded security is planned to occur at a later date.

#### 6. Environmental Impacts

# A. Natural Diversity Database

Groton Utilities review of the Connecticut Department of Energy and Environmental Protection's ("CTDEEP") Natural Diversity Database ("NDDB"), shows that an area of the Substation falls within a NDDB buffered area, but that the work would occur within areas that have been historically subject to on-going disturbances associated with the operation of the Substation. This area has been identified and addressed in Groton Utilities Petition 1436. Petitioner would adhere to the measures and protections provided in connection with that Petition whereby Contractors and Groton Utilities personnel would be educated prior to beginning work and instructed to avoid or minimize impact to terrestrial habitats that may support rare species. As a result, there will be no adverse impact to rare species because of the work.

In addition, the existing substation area is located in the New England Cottontail habitat, but the work would occur within areas that have been historically subject to on-going disturbances associated with the operation of the Substation. Groton Utilities will follow the same Best Management Practices as that filed in connection with Petition 1436. This would consist of educating contractors and Groton Utilities personnel about the NEC and the necessity of avoiding and minimizing the impact to the terrestrial habitats of the NEC.

#### B. 100/500-year flood zone

The Substation is partially located within a 100-year flood zone but is not within the 500-year flood zone. The actual construction work will not impact the area that is identified as within the 100-year flood zone.

### C. Electric and Magnetic Field Levels

Electric and magnetic field levels at the property boundary would not change because of the modifications.

# D. Impact on Wetlands and Watercourses

In connection with its filing of Petition 1436, Groton Utilities identified and delineated water resources in the vicinity of the Substation. The modifications will have no impacts to wetlands as there are no identified wetlands or watercourses within the Substation perimeter and noting that the work would occur within areas that have been historically subject to on-going disturbances associated with the operation of the Substation.

#### E. Scenic, Recreational and Cultural Resources

The impact on scenic or recreational resources were part of studies performed in connection with the filing of Petition 1436 by Groton Utilities. No local, state or federally designated scenic or recreational resources were identified within Substation area. No public or open space properties or trails were identified.

### F. Archeological and Historical Resources Assessment

The impact on previously recorded cultural resources was examined in connection with the filing of Petition 1436 pursuant to a Phase 1A assessment review performed by Heritage Consultants, LLC.

# 7. Municipal and Property Owner Outreach

Groton Utilities orally updated the Town of Groton Town Manager with information on the proposed modification and followed up with a letter to the Town Manager and the Mayor of the Town of Groton notifying them of the impending filing and where to receive additional information or provide comments. A copy of this correspondence is included with this Petition as Attachment E. Attachment F is a map depicting the absence of abutting property owners other than the City of Groton.

# 8. Conclusion

Based on the foregoing, Groton Utilities respectfully submits that the proposed modifications would not result in a substantial adverse effect on the environment, nor would they damage existing

scenic, historical or recreational values. Accordingly, Groton Utilities requests that the Council issue a declaratory ruling that the proposed modifications would have no substantial adverse environmental effect.

Respectfully submitted,

**Groton Utilities** 

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### **List of Attachments**

Attachment A – Perimeter Map

**Attachment B - Bay Construction** 

**Attachment C – Demolition Sequence** 

**Attachment D- Completion Overall Plan** 

Attachment E – Correspondence to Municipal Officials

Attachment F-Abutter Map